



MySQL in the Mandriva Linux distribution

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Mandriva overview

Company at a Glance

- ✓ **European/French and third WW Linux OS vendor**
 - the Only European Editor of Linux large diffusion distribution
 - more than 10 years of experience
 - Headquarter in Paris
- ✓ **Two reference shareholders**
 - Occam Capital and Millennium Partners
 - more than 50% of shares
- ✓ **Listed** (marché libre Paris)
- ✓ **About 75 people:** 40 people in France , 30 in Brazil
- ✓ **Strong Research momentum:** Mandriva is part of multiple european R&D projects (Mancoosi, Nepomuk, Xtreemos, Qualipso...)

Mandriva channel



Current portfolio

Consumer

Powerpack

Flash

One

Free

In Thousands

In Millions

OEM

Mini

Instant on

Enterprise

Pulse

LRS

MDS

MES5
Server

Consumers Products



One

Linux desktop,
easy to try,
easy to keep.



PowerPack

Mandriva Linux
and much more!



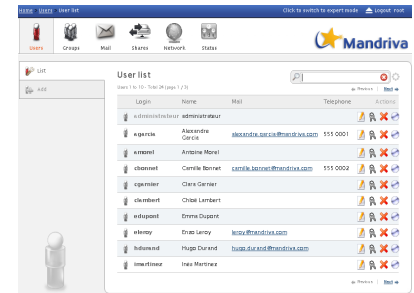
Flash

A mobile desktop
on a USB key



Click'n Backup

Your digital life.
Wherever you are.



MDS

Mandriva Directory Server

Easy-to-use LDAP Identity management system Directory service administration

Products lifetime policy and roadmaps

✓ **Consumer products**

- maintainance: 18 months for base system, 12 months for desktop stack
- release cycle: every 6 months (basically october and april)
- soon available: ability of registering for 18 more months

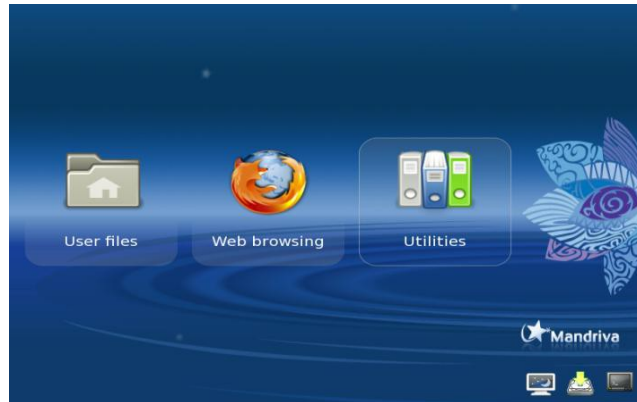
✓ **Enterprise desktop**

- maintainance: 3 years in a restricted scope for desktops
- release cycle: every year (based on october release)

✓ **Enterprise server**

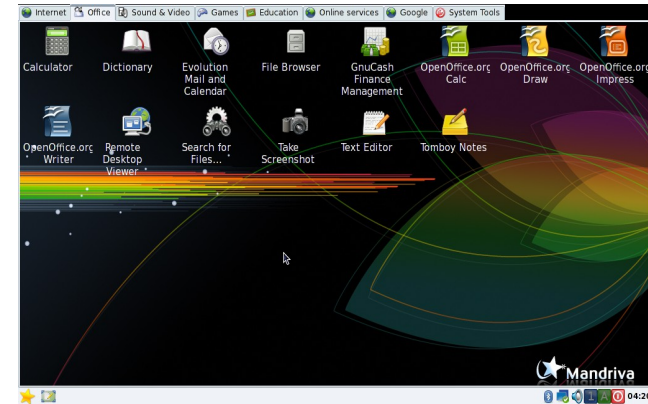
- maintainance: 5 years based on a given scope dedicated to servers needs
- release cycle: every 2 years

OEM Products



InstantOn

- ▶ Boot Time < 7s
- ▶ Small size, optimized flash memory
- ▶ Connectivity support (Wi-fi, 3G cellular)
- ▶ Interface based on QT
- ▶ Modular software offer



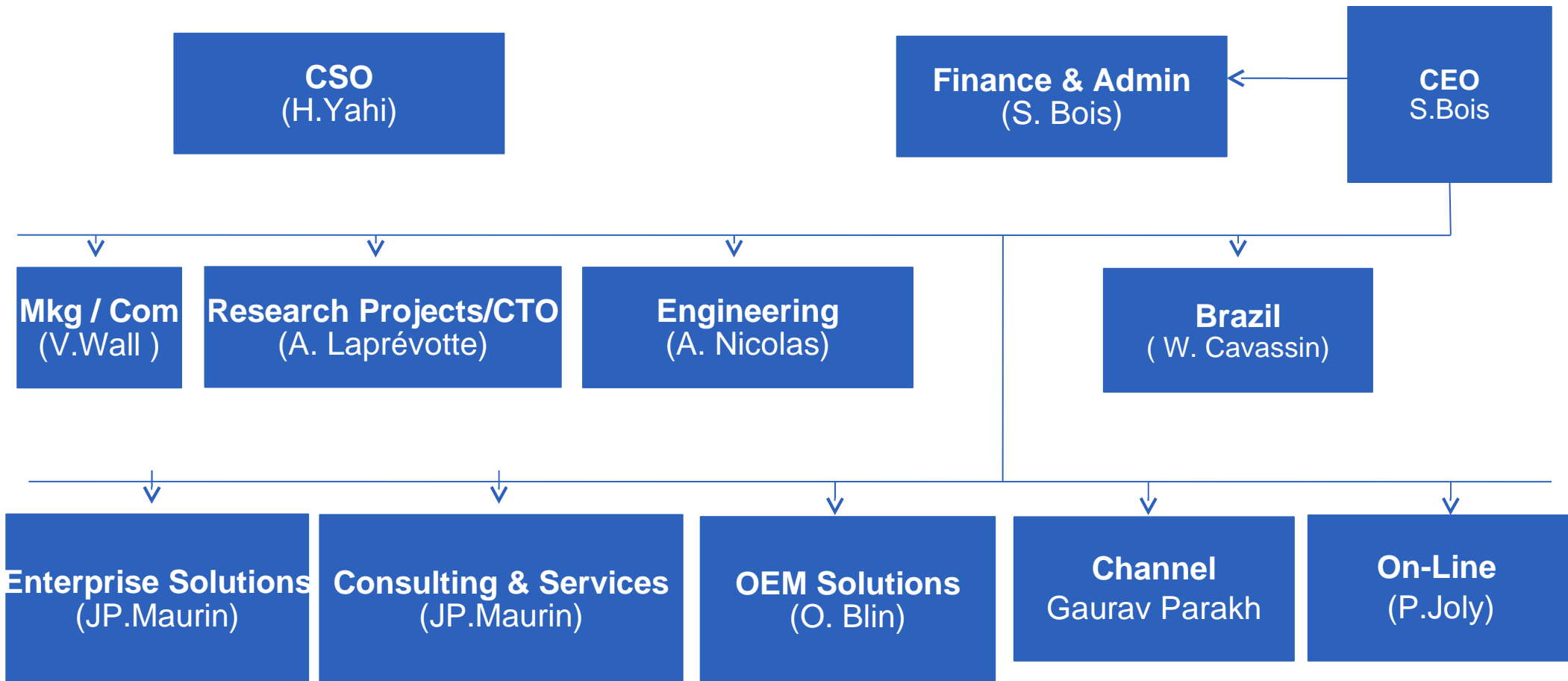
Mandriva Mini

- ▶ Unique selling product differentiation
- ▶ Customized branded interfaces
- ▶ Interface based on QT
- ▶ 20,000 applications available

Targetted architectures

- ▶ **At the moment: x86 architectures** (32 and 64 bits)
- ▶ **In progress: ARM port** (will be public by the end of february 2010)
working together with ARM corp.
contacts in progress with Freescale and Marvell
platforms targets: netbooks, smartbooks, net tops, NAS...

Orgchart / operations





Mandriva specificities

Focus on easy use of Linux

► Whatever targetted product, **easy use of Linux is our main focus together with efficiency**

- **Mandriva Control Center**: network, hardware, partitions, security, system administration
- **Mandriva Directory Server**: manage easily enterprise directories
- **Mandriva Installation Wizard for server**: install server stacks in a few clics and configure it
- **urpmi**: manage complexity of dependancies and maintainance of packages

Give the best of Open Source software

► Mandriva repositories: more than 20.000 packages

- main and contrib repositories
- active community in contrib to put some focus on ongoing softwares
- give the choice to users (ex: KDE/GNOME)



MySQL in Mandriva Linux

MySQL softwares and versions

Mandriva Cooker is currently providing:

- mysql-5.1.43 (main)
- mysql-connector-net-6.1.3 (contrib)
- mysql-connector-odbc-5.1.6 (contrib)
- mysql-gui-tools-5.0r14 (contrib)
- mysql-proxy-0.8.0 (contrib)
- mysql-workbench-oss-5.1.16 (contrib)
- eventum-2.1.1 (contrib)

Linkage and usage

111 packages linking to the shared mysql client libraries

Since KDE 4.2

- the /usr/sbin/mysqld binary is used by KDE PIM / Akonadi for storing PIM data (sqlite3 didn't scale well). The rumour says amarok2 will also require the mysqld binary

Products and MySQL usage

Corporate Server 4 / 2008.0 (Corporate desktop)

- mysql-5.0.45

Enterprise Server 5 / 2009.0

- mysql-5.0.89 (sphinx-0.9.8.1)

2009.1 / 2010.0

- mysql-5.1.42 (sphinx-0.9.9, pbxt-1.0.09-rc, revisionv01)

Mandriva customizations

From Mandriva Linux 2010.0

- **bundled storage engines** are built as modules for the -max version and loaded by default from the /etc/my.cnf file.

Third party storage engines

- sphinx-0.9.9, pbxt-1.0.09-rc and revisionv01 provides added value to the distribution.
- memcached_functions_mysql-1.0 (contrib).

A **slightly modified my-medium.cnf** is used for the system /etc/my.cnf

Mandriva patches

The `-avoid-version` libtool patch:

```
[...]  
-libdaemon_example_la_LDFLAGS = -module -rpath $(pkgplugindir)  
+libdaemon_example_la_LDFLAGS = -module -avoid-version -rpath $(pkgplugindir)  
[...]
```

Other patches applied are rather Mandriva specific.

The current patches can be found in the subversion repository:

<http://svn.mandriva.com/cgi-bin/viewvc.cgi/packages/cooker/mysql>

Enhancements and problems

make check

- could be enhanced to **look for unused ports on localhost** and use these to avoid problems while building it for several products on the same build host.

Make (all) the storage engines modular

- implement a loading mechanism like in apache where you just throw in a configuration file in /etc/mysql.d that loads the module with a “LoadModule ...” statement.
- Current way, as done now in Mandriva is pretty rough.

Enhancements and problems

Prone to change too much between minor versions which makes a small version bump hazardous.

- <http://bugs.mysql.com/bug.php?id=23427>
urpmi abi-compliance-checker?

Autotools

Get access to security related issues in advance

Pending bugs

CVE-2008-7247: mysql - remote bypass access restrictions vulnerability

https://qa.mandriva.com/show_bug.cgi?id=56115

Innodb crash with Error: (1500) Couldn't read the MAX(ID) autoinc value from the index (PRIMARY)

https://qa.mandriva.com/show_bug.cgi?id=56963